From: Partridge, Charles [Partridge.Charles@epa.gov]

**Sent**: 12/17/2019 8:11:52 PM

To: Wall, Dan [wall.dan@epa.gov]; Lynn Woodbury [woodburyl@cdmsmith.com]
CC: David Shanight [shanightdt@cdmsmith.com]; Greene, Nikia [Greene.Nikia@epa.gov]

**Subject**: RE: Briefing on Thursday

I like it.

## Ex. 5 Deliberative Process (DP)

ср

From: Wall, Dan <wall.dan@epa.gov>

**Sent:** Tuesday, December 17, 2019 12:41 PM **To:** Lynn Woodbury <woodburyl@cdmsmith.com>

Cc: Partridge, Charles <Partridge.Charles@epa.gov>; David Shanight <shanightdt@cdmsmith.com>; Greene, Nikia

<Greene.Nikia@epa.gov>

Subject: Re: Briefing on Thursday

I like this as an accompaniment to the table. Charlie/Nikia do you want to see the other format?

Sent from my iPhone

On Dec 17, 2019, at 12:25 PM, Woodbury, Lynn <woodburyl@cdmsmith.com> wrote:

All –

Here is a mock-up of the meconium comparison figure using manganese as an example:

<image001.png>

[Dan – I know when we spoke before we discussed keeping it on a linear scale, but the disparity of the Columbia dataset is most obvious when shown on a logscale.]

Let me know your thoughts on the figure...if you like the way this looks, we can create similar ones for the other metals. If desired, we could also create the other illustrative graphic for comparison. Thanks,

Lynn

Lynn Woodbury | CDM Smith | 555 17th Street, Suite 500 | Denver, CO 80202 | direct: 303.383.2382 | fax: 303.308.3003 | woodburyL@cdmsmith.com

From: Woodbury, Lynn

Sent: Tuesday, December 17, 2019 11:19 AM

To: Partridge, Charles < Partridge. Charles@epa.gov >; Wall, Dan < wall.dan@epa.gov > Cc: Shanight, David < ShanightDT@cdmsmith.com >; Greene, Nikia < Greene. Nikia@epa.gov >

Subject: RE: Briefing on Thursday

Hi Charlie -

I spoke briefly to Dan...first, I'm going to do an example graph for manganese; then, if necessary, we will develop the graphic. I'll send over the figure as soon as I can.

Lynn

Lynn Woodbury | CDM Smith | 555 17th Street, Suite 500 | Denver, CO 80202 | direct: 303.383.2382 | fax: 303.308.3003 | woodburyL@cdmsmith.com

From: Partridge, Charles < Partridge. Charles@epa.gov>

Sent: Tuesday, December 17, 2019 10:56 AM

To: Woodbury, Lynn < woodburyl@cdmsmith.com >; Wall, Dan < wall.dan@epa.gov >

Cc: Shanight, David <ShanightDT@cdmsmith.com>; Greene, Nikia <Greene.Nikia@epa.gov>

Subject: RE: Briefing on Thursday

Lynn,

Just talked to Dan. Lets give it a try. Create a graph like the one below. Let's do it for one metal and see how it looks before we commit to anything

ср

From: Woodbury, Lynn < woodburyl@cdmsmith.com >

Sent: Tuesday, December 17, 2019 10:48 AM

To: Wall, Dan <wall.dan@epa.gov>

Cc: David Shanight <shanightd@cdmsmith.com>; Greene, Nikia <Greene.Nikia@epa.gov>; Partridge,

Charles < Partridge. Charles@epa.gov > Subject: RE: Briefing on Thursday

Hi Dan,

I don't think we have the statistics of interest to allow for a box and whisker plot, but we can probably prepare a graph with mid-points and high-low lines (when available).

A potential alternative to preparing a graph would be a more illustrative graphic. For example, here is an example of a graphic to illustrate blood lead levels and toxicity: <image004.jpg>

We could do something similar with the meconium concentrations, where the Butte and Columbia data statistics are shown within the context of the other studies. I think this type of a graphic would really drive home that Butte is in the middle of the other studies, while the Columbia data are uncharacteristically low.

What do you think? Lynn

Lynn Woodbury | CDM Smith | 555 17th Street, Suite 500 | Denver, CO 80202 | direct: 303.383.2382 | fax: 303.308.3003 | woodburyL@cdmsmith.com

From: Wall, Dan <<u>wall.dan@epa.gov</u>>
Sent: Tuesday, December 17, 2019 9:55 AM

To: Greene, Nikia < Greene. Nikia@epa.gov>; Partridge, Charles < Partridge. Charles@epa.gov>

Cc: Shanight, David <ShanightDT@cdmsmith.com>; Woodbury, Lynn <woodburyl@cdmsmith.com>

Subject: RE: Briefing on Thursday

Ideally I think a box and whisker plot for the metals of interest would be the best. The McDermott study (Butte and SC) on the left, and the relevant studies plotted moving to the right.

Having said that, I don't think the data will allow that to be done for every study and will need CDMs input to see if there is a better approach.

From: Greene, Nikia < Greene. Nikia@epa.gov> Sent: Tuesday, December 17, 2019 9:23 AM

To: Wall, Dan <wall.dan@epa.gov>; Partridge, Charles <Partridge.Charles@epa.gov>

Cc: David Shanight <shanightdt@cdmsmith.com>; Lynn Woodbury <woodburyl@cdmsmith.com>

Subject: FW: Briefing on Thursday

Dan,

CDM is on standby and ready to go. Can you describe the graphic you are thinking of beyond the table?

Thanks,

Nikia Greene Remedial Project Manager U.S. EPA, Region 8 (406)-457-5019 greene.nikia@epa.gov

From: Wall, Dan <wall.dan@epa.gov>

Sent: Tuesday, December 17, 2019 8:15 AM

To: Greene, Nikia <Greene.Nikia@epa.gov>; Partridge, Charles <Partridge.Charles@epa.gov>

Cc: Vranka, Joe <vranka.joe@epa.gov>

**Subject:** Briefing on Thursday

## Nikia

I would like to ask CDM to pull together a graphic of Butte meconium levels compared to the studies we've uncovered so far. Any problem with that?

Also, Charlie, I think if you could pull together paragraph of your initial exposure calculations and a graph of those compared to FDA nutritional guidelines that would be helpful as well. We can talk about this when you get in.

Dan Wall, Ph.D.

Technical Assistance Branch Chief U.S. EPA, Region 8 1595 Wynkoop Street Denver, CO 80202

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